

MAC Access-List Configuration

Table of Contents

MAC Access-List Configuration.....	I
Table of Contents.....	I
Chapter 1 MAC Access-List Configuration.....	1
1.1 Creating MAC Access-List.....	1
1.2 Configuring Items of MAC Access List.....	1
1.3 Applying MAC Access List.....	2

Chapter 1 MAC Access-List Configuration

Access-list configuration includes:

- Creating MAC access-list
- Configuring items of MAC access-list
- Applying MAC access-list

1.1 Creating MAC Access-List

A MAC access-list must be created first before applying it on the port. When a MAC access-list has been created, it enters MAC access-list configuration mode, under which items of MAC access-list can be configured.

Enter privilege mode and use the following steps to add or delete a MAC access-list.

Command	Purpose
configure	Enters the global configuration mode.
[no] mac access-list <i>name</i>	Adds or cancels a MAC access list Name stands for the name of mac access list

1.2 Configuring Items of MAC Access List

In MAC access-list configuration mode, specify to permit or deny any source MAC address or a specific host source MAC address and any destination MAC address. The same items can be configured in a MAC access list only once.

If there is no permit any any or deny any any in the access list, one command "deny any any" will be automatically applied in the end.

Enter MAC access list configuration mode and use the following steps to set MAC access list entry.

Command	Purpose
[no] {permit deny} {any host <i>src-mac-addr</i> <i>src-mac-addr</i> <i>src-mac-addr-mask</i>} {any host <i>dst-mac-addr</i> <i>dst-mac-addr</i> <i>dst-mac-addr-mask</i>} [arp [{<i>any</i> <i>src-ip-addr</i>} {<i>any</i> <i>dst-ip-addr</i> }]] [<i>ethertype</i>]	Adds/deletes a MAC access list entry. You can repeat this command to add/delete multiple MAC access list entry. Any means match with any MAC address; <i>src-mac-addr</i> stands for source MAC address; <i>src-mac-addr-mask</i> stands for source MAC address mask; <i>dst-mac-addr</i> stands for destination MAC address;

	<p><i>dst-mac-addr-mask</i> stands for destination MAC address mask;</p> <p>arp stands for matched arp packet;</p> <p><i>src-ip-addr</i> stands for source ip address stands for source ip address;</p> <p><i>dst-ip-addr</i> stands for the destination ip address;</p> <p><i>ethertype</i> stands for type of the matched Ethernet packet</p>
exit	Logs out from the MAC list configuration mode and enters the global configuration mode again.
exit	Goes back to the EXEC mode.
write	Saves the settings.

MAC list configuration example

```
Switch_config# mac access-list 1
Switch-config-macl# permit host 1.1.1 any
Switch-config-macl# permit host 2.2.2 any
```

The above configuration is to compare the source MAC address, so the mask is the same. The configuration is successful.

1.3 Applying MAC Access List

The created MAC list can be applied on any physical port. Only one MAC list can be applied to a port. The same MAC list can be applied to multiple ports.

Note:

MAC access list cannot be applied on the ONU port. Refer to "ONU Management Configuration" for the configuration mode of ONU port.

Enter the privilege mode and perform the following operation to configure the MAC list.

Command	Purpose
config	Enters the global configuration mode.
interface g0/1	Enters the to-be-configured port.
[no] mac access-group name [egress]	<p>Applies the established MAC access list to an interface or cancel a MAC access list which is already applied to an interface.</p> <p><i>Name</i> stands for the name of access list</p> <p>Egress means the role on the egress direction.</p>

exit	Goes back to the global configuration mode.
exit	Goes back to the EXEC mode.
write	Saves the settings.

MAC access list can also be applied in the global mode. MAC access list in the global mode functions on all ports.

Enter the privilege mode and perform the following operation to configure the MAC list.

Command	Purpose
configure	Enters the global configuration mode.
[no] mac access-group name [egress vlan {WORD add WORD remove WORD}]	Applies the established MAC access list to an interface or cancel a MAC access list which is already applied to an interface. <i>Name</i> stands for the name of access list Egress means the role on the egress direction. Vlan: The access list is applied in ingress. <i>word</i> applies to vlan range table add: add vlan to the range table of the applied vlan remove: remove vlan from the vlan range table
exit	Goes back to the EXEC mode.
write	Saves the settings.